

The DEH-HMD began enforcing the State requirements for hazardous waste tank(s)/tank systems in 1998. Since then, facilities have been required to provide secondary containment and/or a professional engineering assessment and certification attesting to the design and integrity of most tank systems, especially new tanks.

“New” and “Existing” Tanks

These terms are used to determine which State regulations apply. Generally, tank systems installed before July 1, 1991 are considered “existing,” while those installed or modified after that date are considered “new.” The applicable code sections are CCR §66265.191 for existing tank systems, and §66265.192 for new tanks. The definition of existing and new tank systems is also found in CCR §66260.10.

What’s Required?

Tank systems require secondary containment and a professional engineering (PE) assessment every 5 years. On October 8, 2006 the State regulations were updated. As of July 1, 2006 both existing and new tank systems are required to be assessed by an independent California registered professional engineer (P.E.) and meet the release (leak) detection requirements of §66265.193, including proper secondary containment. Existing tank systems (those operating before July 1991) that were installed with proper secondary containment and leak detection may, however, be exempt from the PE assessment and certification requirement. It is important to notice, however, that major modifications, changes, or additions to existing tank systems usually require that a P.E. assessment and certification be performed.

Selecting an Engineer

There are many engineering firms and many types of engineers. Regulations require the engineer to be registered as a professional engineer in the State of California. An engineer must also be independent, meaning that he or she is not regularly employed by the business hiring them to assess and certify the tank system.

When selecting an engineer, it is important to ask how many hazardous waste tank system assessments they have done. Also ask whether their reports were accepted by HMD as being complete.

What Is Included In A “Tank System?”

Tanks, ancillary equipment and floor sumps are the most common components of a tank system. “Tank system” means a hazardous waste transfer, storage or treatment tank and its associated ancillary equipment and containment system. [22 CCR 66260.10]

A "Tank" is a stationary device, designed to contain hazardous waste and constructed of non-earthen materials providing structural support. A filter press may meet the definition of a tank.

“Ancillary equipment” includes, but is not limited to, piping, valves pumps, and trenches used to distribute or control the flow of hazardous waste **from its point of generation** to a storage or treatment tank, between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal offsite.

A “Sump” is any pit that meets the definition of tank that collects hazardous waste for transport to hazardous waste storage or treatment. There are three types of sumps, depending on their use:

1. **Emergency containment** - Sumps that are used for emergency containment are exempt from secondary containment and PE certification if they are kept clean and dry except after rare and unpredictable events.
2. **Secondary containment** - Sumps that are used as secondary containment must meet all secondary containment standards.
3. **Primary containment** - Sumps used as primary containment routinely accumulate waste and therefore are fully regulated as tanks.

Let’s consider an example:

A corrosive waste (with a pH greater than 12.5 or less than 2) is discharged into a sump that is pumped into a pipe conveying waste to a tank. The waste is diluted during the discharge process before it even reaches a treatment tank.

What is included in the tank system? The sump, pipe, pump, and tank are all part of this hazardous waste tank system.

Certification Statement

An independent, professional engineer, registered in California, must certify the tank system assessment with the following wording:

“I certify under penalty of perjury of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.” [22CCR §66270.11(d)]

Most Common Deficiencies Seen in P.E. Certifications

- Failure to address all aspects of the required report: all parts of CCR 66265.192(k) for “new” tank systems, or all parts of 66265.191(g) for “existing” tank systems.
- Evaluations of components in the tank system report are omitted.
- The proper certification statement language is not included.
- Failure to evaluate the entire tank system (piping from the points of generation to the tanks is often neglected).
- The results of the tightness testing required by 66265.192 (k)(10) or the results of the leak test/inspection required by 66265.191(g)(9) are omitted.

Exemptions from Secondary Containment

Small Quantity Generators {those who always generate less than 1000 kg of hazardous waste per month (including wastewater to be treated) and less than 1 kg/month of acutely hazardous waste) are subject to different tank system requirements under 40 CFR §265.201.

Tanks/Tank Systems utilized by Small Quantity Generators:

- **Do not need Engineer's Assessment or Exemption or Secondary Containment**
- Uncovered tanks need 2 feet of freeboard unless equipped with a containment structure (e.g. dike or trench) greater than or equal to the volume of top 2 feet of the tank.
- Each operating day must be inspected, to include: waste level, tank's structure, and integrity, and surroundings.
- The tank must be labeled as "Hazardous Waste"
- The waste accumulation start date must be on the tank or maintained in the facility log.

Important Note: Facilities using tank systems as a part of an onsite hazardous waste treatment process regulated under the Permit by Rule or Conditional Authorization tiers may still be required to meet hazardous waste tank standards even if the facility is a small quantity generator.